

Patent Claims

1. An appliance for the epilation of the human skin (21, 61), having a housing (2, 41) to accommodate a motor for driving at least one clamping device (4, 43) rotary about an axis for epilation, and having a means to reduce the sense of pain during epilation, said means including at least one element (55) that is movable toward and away from the skin (61) when the appliance is placed in epilating position on the user's skin (61), characterized in that the at least one element (55) has a free end (56) and is arranged adjacent to the side of the rotary clamping device (43).

2. The appliance as claimed in claim 1, characterized in that a plurality of elements (55) are arranged side by side in a row essentially parallel to each other.

3. The appliance as claimed in claim 1 or 2, characterized in that the row of elements (55) is arranged essentially parallel to the axis of the clamping device (43).

4. The appliance as claimed in claim 1, 2 or 3, characterized in that the elements (55) are arranged essentially parallel to the outer side of the housing (41).

5. The appliance as claimed in any one of the preceding claims, characterized in that the element (55) is of a ram-type configuration with a point (56) on a free end.

6. The appliance as claimed in any one of the preceding claims, characterized in that the points (56) of the elements (55) form essentially one plane with the clamping devices (43) of the epilation head (40) when the appliance is placed against

the user's skin (61) in epilating position, thus enabling the points (56) to just about touch the user's skin (21, 61).

7. The appliance as claimed in any one of the preceding claims, **characterized in that** the ram-type elements (55) strike the skin (61) essentially vertically when the epilation head (40) is placed against the skin (61) in epilating position.

8. The appliance as claimed in any one of the preceding claims, **characterized in that** the elements (55) perform an essentially rectilinear movement proceeding substantially in the longitudinal direction of the elements (55).

9. The appliance as claimed in any one of the preceding claims, **characterized in that** the free end (56) of the element (55) is of a pyramidal, conical or similar configuration tapered to a point.

10. The appliance as claimed in any one of the preceding claims, **characterized in that** the clamping device (43) performs a rotary movement with a cyclic opening and closing of the clamping members, and that the element (55) is coupled with the drive mechanism of the clamping device (43).

11. The appliance as claimed in any one of the preceding claims, **characterized in that** the element (55) is movable by spring force and/or by cam tracks or the like.

12. The appliance as claimed in any one of the preceding claims, **characterized in that** the element (55) is lowered onto the skin (61) in particular directly before or during epilation and is lifted from the skin (61) in particular directly upon striking the skin (61).

13. The appliance as claimed in any one of the preceding claims, **characterized in that** the processes of lowering the element (55) onto the skin (61) and lifting the element (55) from the skin (61) are controlled by mechanical means.

14. The appliance as claimed in any one of the preceding claims, **characterized in that** the element (55) is associated with a drive shaft (48) by means of which the element (55) is lowered into contact with the skin (61) and lifted off again.

15. The appliance as claimed in claim 14, **characterized in that** the drive shaft (48) is configured in the manner of a crank and is coupled with the element (55).

16. The appliance as claimed in any one of the preceding claims, **characterized in that** the element (55) includes a guide (57) in which the drive shaft (48) engages.

17. The appliance as claimed in any one of the preceding claims, **characterized in that** gears (49, 50, 53, 54), bevel gears or the like are provided to establish connection between the drive shaft (48) and the clamping device (43).

18. The appliance as claimed in any one of the preceding claims, **characterized in that** the drive shaft (48) is arranged approximately parallel to the axis of the clamping device (43).

19. The appliance as claimed in any one of the preceding claims, **characterized in that**, with the appliance placed against the user's skin (61) in epilating position, the element (55) strikes the skin (61) in the manner of a pulse before or during epilation.

20. A method for the epilation of the human skin (61), in which a mechanical pulse is delivered to the user's skin (61) by means of at least one element (55) coupled with the drive mechanism of a clamping device (43) for epilation, said pulse causing the user either not to feel the actual pain of the epilation or to feel it only as a pain of lower amplitude, characterized in that a free end (56) of the at least one element (55) strikes the skin (61), and that the element (55) is arranged adjacent to the side of the rotary clamping device (43).

21. The method as claimed in claim 20, characterized in that the element (55) is moved in an essentially straight line.

22. The method as claimed in claim 20 or 21, characterized in that the pulse is delivered at an instant of time preceding an epilation or during an epilation.

23. A method for the use of an appliance according to any one of the claims 1 to 19, characterized in that the appliance is placed against the user's skin (61) to be treated and moved over the skin (61) in such a way that the means for reducing the sense of pain, in particular the free end (56) of the at least one element (55), precedes the rotary clamping device (43) for epilation viewed in the direction of movement.